IN THE CLAIMS:

Amend claim 14 as shown in the following listing of claims, which replaces all previous listings and versions of claims.

1. (previously presented) A gas compressor for sucking in, compressing, and discharging refrigerant gas, the gas compressor comprising:

an elliptical cylinder;

a rotor rotatably arranged in the cylinder;

vane grooves radially formed in the rotor;

vanes slidably disposed in the vane grooves and capable of projecting and retracting radially with respect to the rotor;

a flat groove configured and arranged to communicate with vane groove bottom portions during a refrigerant gas sucking/compressing process;

a high pressure supplying hole configured and arranged to communicate with the vane groove bottom portions upon interception of the communication between the vane groove bottom portions and the flat groove in the refrigerant gas compressing process; and

a communication passage for establishing communication between the flat groove and the high pressure supplying hole at the start of operation of the gas compressor.

2. (previously presented) A gas compressor according to claim 1; further comprising an exhaust chamber for temporarily storing refrigerant gas discharged from the cylinder;

an oil sump formed in a lower portion of the exhaust chamber;

a first supplying passage establishing communication between the oil sump and the high pressure supplying hole; and

a second supplying passage branching off from the first supplying passage and communicating with the flat groove;

wherein the communication passage is formed by the first supplying passage and the second supplying passage.

3. (previously presented) A gas compressor according to claim 1; further comprising a first pressure control valve provided in the communication passage and operative to be brought into a closed state when the difference between a pressure in the exhaust chamber and a pressure in the flat groove becomes not less than a predetermined value.

4. (previously presented) A gas compressor according to claim 2; further comprising a first pressure control valve provided in the second supplying passage and operative to be brought into a closed state when the difference between a pressure in the exhaust chamber and a pressure in the flat groove becomes not less than a predetermined value.

5. (previously presented) A gas compressor according to claim 2; further comprising a second pressure control valve provided in the first supplying passage on the downstream side of the oil sump and on the upstream side of a branch-off point for the second supplying passage, and operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and a pressure at the branch-off point for the second supplying passage becomes not more than a predetermined value.

6. (previously presented) A gas compressor according to claim 4; further comprising a second pressure control valve provided in the first supplying passage on the downstream side of the oil sump and on the upstream side of a branch-off point for the second supplying passage, and operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and a

pressure at the branch-off point for the second supplying passage becomes not more than a predetermined value.

7. (previously presented) A gas compressor according to claim 2; further comprising a third supplying passage situated on the downstream side of the oil sump and branching off from the first supplying passage on the upstream side of the branch-off point for the second supplying passage; and

a second pressure control valve situated in the first supplying passage and between the branch-off point for the second supplying passage and the branch-off point for the third supplying passage and operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and the pressure at the branch-off point for the second supplying passage is not more than a predetermined value.

8. (previously presented) A gas compressor according to claim 4; further comprising a third supplying passage situated on the downstream side of the oil sump and branching off from the first supplying passage on the upstream side of the branch-off point for the second supplying passage; and

a second pressure control valve situated in the first supplying passage and between the branch-off point for the second supplying passage and the branch-off point for the third supplying passage and operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and the pressure at the branch-off point for the second supplying passage is not more than a predetermined value.

9. (previously presented) A gas compressor according to claim 4; further comprising a third supplying passage further branching off from the branch-off point for the second supplying passage and operative to supply lubricant to a front portion of the interior of a main body of the gas compressor; and

a third pressure control valve situated at a position in the third supplying passage behind the branch-off point and operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and the pressure in the third supplying passages is not more than a predetermined value.

10. (previously presented) A gas compressor according to claim 5; further comprising a third supplying passage further branching off from the branch-off point

for the second supplying passage and operative to supply lubricant to a front portion of the interior of a main body of the gas compressor; and

a third pressure control valve situated at a position in the gas compressor main body in front of the oil sump and inside the third supplying passage behind the branch-off point and operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and a pressure in the third supplying passages is not more than a predetermined value.

11. (previously presented) A gas compressor comprising:

a compressor case;

a cylinder disposed in the compressor case and having a generally elliptical inner peripheral surface;

a rotationally driven rotor rotatably disposed in the cylinder;

plural vane grooves formed in the rotor and extending inwardly from an outer peripheral surface of the rotor;

plural vanes slidably disposed in respective ones of the vane grooves and cooperating with the inner peripheral surface of the cylinder and the outer peripheral surface of the rotor to define plural compression chambers for intaking a

gas, compressing the gas and discharging compressed gas during rotation of the rotor;

means defining an arcuate groove configured and arranged to communicate with bottom portions of the vane grooves during intaking and compression of the gas in the compression chambers;

means defining a high pressure supplying hole configured and arranged to communicate with the bottom portions of the vane grooves during end stage compression of the gas in the compression chambers at times when the bottom portions of the vane grooves are not in communication with the arcuate groove; and

a communication passage for establishing communication between the arcuate groove and the high pressure supplying hole at the start of operation of the gas compressor.

12. (previously presented) A gas compressor according to claim 11; further comprising an exhaust chamber for temporarily storing gas discharged from the cylinder;

an oil sump formed in a lower portion of the exhaust chamber;

a first supplying passage establishing communication between the oil sump and the high pressure supplying hole; and

a second supplying passage branching off from the first supplying passage and communicating with the arcuate groove;

wherein the communication passage is formed by the first supplying passage and the second supplying passage.

13. (previously presented) A gas compressor according to claim 11; further comprising a first pressure control valve provided in the communication passage and operative to be brought into a closed state when the difference between a pressure in the exhaust chamber and a pressure in the arcuate groove becomes not less than a predetermined value.

14. (currently amended) A gas compressor according to claim 12; further comprising a first pressure control valve provided in the second supplying passage and operative to be brought into a closed state when the difference between a pressure in the exhaust chamber and a pressure in the ~~flat~~ arcuate groove becomes not less than a predetermined value.

15. (previously presented) A gas compressor according to claim 12; further comprising a second pressure control valve provided in the first supplying passage on the downstream side of the oil sump and on the upstream side of a branch-off point for the second supplying passage, and

operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and a pressure at the branch-off point for the second supplying passage becomes not more than a predetermined value.

16. (previously presented) A gas compressor according to claim 14; further comprising a second pressure control valve provided in the first supplying passage on the downstream side of the oil sump and on the upstream side of a branch-off point for the second supplying passage, and operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and a pressure at the branch-off point for the second supplying passage becomes not more than a predetermined value.

17. (previously presented) A gas compressor according to claim 12; further comprising a third supplying passage situated on the downstream side of the oil sump and branching off from the first supplying passage on the upstream side of the branch-off point for the second supplying passage; and

a second pressure control valve situated in the first supplying passage between the branch-off point for the second supplying passage and the branch-off point for the third supplying passage and operative to be brought into the

closed state when the difference between the pressure in the exhaust chamber and the pressure at the branch-off point for the second supplying passage is not more than a predetermined value.

18. (previously presented) A gas compressor according to claim 14; further comprising a third supplying passage situated on the downstream side of the oil sump and branching off from the first supplying passage on the upstream side of the branch-off point for the second supplying passage; and

a second pressure control valve situated in the first supplying passage between the branch-off point for the second supplying passage and the branch-off point for the third supplying passage and operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and the pressure at the branch-off point for the second supplying passage is not more than a predetermined value.

19. (previously presented) A gas compressor according to claim 14; further comprising a third supplying passage further branching off from the branch-off point for the second supplying passage and operative to supply lubricant to a front portion of the interior of a main body of the gas compressor; and

a third pressure control valve situated at a position in the third supplying passage behind the branch-off point and operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and the pressure in the third supplying passages is not more than a predetermined value.

20. (previously presented) A gas compressor according to claim 15; further comprising a third supplying passage further branching off from the branch-off point for the second supplying passage and operative to supply lubricant to a front portion of the interior of a main body of the gas compressor; and

a third pressure control valve situated at a position in the gas compressor main body in front of the oil sump and inside the third supplying passage behind the branch-off point and operative to be brought into the closed state when the difference between the pressure in the exhaust chamber and a pressure in the third supplying passages is not more than a predetermined value.